

# Photodiode as current source

## Student Group

First Name	Surname	Matrikel Nr.

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### Photo Diode as current source

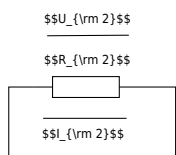


Fig. 3: Inverting Op-Amp: Photo Diode as current source

$U_{DD} \approx 10\text{V}$ ,  $U_{SS} \approx -10\text{V}$ ,  $R_1 \approx 10\text{k}\Omega$

Use the values from figure ## for  $U_{IN}$ ,  $U_{OUT}$ ,  $R_2$ .

Complete the arrows in the scematic of the circuit.

Take the values for  $U_1$ ,  $U_2$ ,  $U_{OUT}$  from figure ##.

Use these values to calculate the sum of the voltages at node  $N_{12}$ .

Compare your result by measuerement.

$U_1 \approx$

$U_2 \approx$

$U_{OUT} \approx$

Calculated  $U_{N_{12}} \approx$

Measured  $U_{\text{12}}$

What are your results?

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$\text{\rm .....}$

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What will happen if you short-circuit  $R_{\text{2}}$ ?  
Try it and explain your results.

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